

Description

The objective of this initiative is to develop and implement common and compatible formats for the transmission of analytical data. Laboratory data is typically delivered to the end-user in two formats: hardcopy data package and Electronic Data Deliverable (EDD). The hardcopy data package is used primarily for data validation and becomes part of the permanent project record. The EDD is commonly uploaded to a database for use in a number of activities. These activities include generating data tables for formal reports, performing automated data reviews, integrating analytical data into geographical information systems (for site map development), and providing data for risk assessment calculations. DOE-EM has worked for several years on efforts to establish the standardization of electronic deliverable formats. The DOE-EM Electronic Data Deliverable Master Specification (DEEMS) was published in 1995. The data element dictionary developed for DEEMS was also the basis for the development of two additional compatible EDD specifications: the Environmental Management Electronic Data Deliverable Tier-1 (EMEDD-1) Specification and the Superfund Electronic Data Deliverable (SEDD) Specification. EMEDD-1 supports the transmission of sample results and method QC data in either a relational or flat file format. EMEDD-1 was issued in May 2000. The SEDD Specification was developed as a cooperative effort between the Environmental Protection Agency, the United States Army Corps of Engineers, and DOE. This specification supports the transmission of all analytical data (sample results, method QC, instrument QC, and raw data) in an eXtensible Markup Language (XML) format.

Status

EMEDD-1 Version 1.3 was issued in June 2002. The format was initially distributed to DOE Sample Management Offices in June 2000 for voluntary implementation. Since then, several sites have either amended existing contracts to mandate the delivery of EMEDD-1 files, or they are writing this requirement into new analytical services contracts. Seven DOE sites currently support the development and maintenance of EMEDD-1.

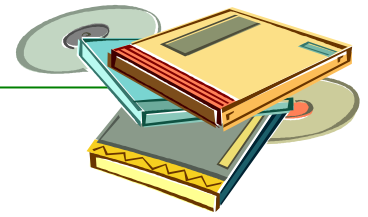
A draft of the SEDD Specification was issued in 2002. Both the EPA and USACE are currently planning to stipulate the use of this specification for the transmission of analytical data. The SEDD Specification supports delivery of data in a variety of stages. The specification is very flexible and facilitates the reporting of results-only data to full data package reporting that will allow for independent recalculation of reported results. It is predicted that EMEDD-1 will eventually migrate to SEDD when laboratories move toward XML data storage.

Benefit to EM

The use of compatible electronic data deliverable formats present several potential benefits to DOE-EM:

- Cost savings at the Sample Management Office level due to the elimination of site-specific data deliverable formats;
- Data sharing across various organizations within DOE-EM;
- Possible development and usage of automated data review tools.

Data Deliverables



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